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GOVERNMENT OF THE PROVINCE OF SASKATCHEWAN
DEPARTMENT OF AGRICULTURE

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# Feeding and Care of Work Horses

The proper feeding and care of the work horse is a question which vitally affects every farmer in the West and one, also, that should receive more attention than it does. Taking feeding first, it is necessary that the feed fed should keep the animal healthy and in good condition and should be as low priced as compatable with these requirements; this makes it an extremely difficult problem for two reasons.

1. Because the work is of such a variable nature that the animal requires different amounts of feed from time to time if it is to be kept in good health and condition and still fed economically.

2. Because the most satisfactory feeds are not always available, and, if available, are not always the most economical. An experiment conducted in North Carolina showed that "Home-grown feeds, when used in the proper quantities, are just as valuable as any ration than can be fed." If this is the case in North Carolina, it is much more so in Saskatchewan, where both grain and roughage of the admittedly most suitable classes are standard crops. In making a study of feeding horses, a comparison of the amount of feed required for maintenance and for work constitutes an appropriate beginning. Roughly speaking it takes 32% of the value of an average ration to digest itself, and as a horse takes 34% of the value of the food fed for external work, and requires 38% for bodily maintenance, the 4% deficit must be recuperated during the period when the animal is at rest.

## Grains.

There are several kinds of grain available in Western Canada for horsefeed, but it has been incontestably proven that oats are the most valuable. Barley, wheat and rye are useful, but none of these grains should constitute more than 25 per cent. of the average grain ration, especially during the working season, and as a rule should be mixed with oats up to this percentage by weight.

Bran is a valuable adjunct and may be fed up to 50 per cent. by volume, of the grain ration. It helps to keep the bowels free and the animal in good condition. Horses not accustomed to bran should have the amount fed increased gradually to the above proportion. For idle horses the percentage of bran in the grain ration may be greatly increased, but the total amount of feed should be cut down. Horses that are not accustomed to barley should be fed a small amount at first, especially if it is crushed. As a general rule, crushing is profitable, especially in the case of the older horses, but horses with heaves or broken wind are better on whole feed. The harder a horse is working, the better it will pay to cut the roughage and crush the grain. This is especially true in the case of aged animals. The amount of grain fed will vary with the size of the animal, the quality of the feed, the class of

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work done, and the speed at which it is performed. On an average, a horse at hard work weighing 1,500 or over, should receive six quarts of good oats or the equivalent at each meal, and lighter or heavier horses in proportion, Always reduce the grain ration of the horse that is idle for any length of time.

## Dry Roughage.

Dusty or mouldy hay, straw or fodders should be avoided. Lung troubles such as bronchitis and heaves may result, and if present, are aggravated. Digestive troubles are often traceable to this cause and abortion has frequently resulted from the accidental feeding of ergot in poor hay. Of what are known as "tame" grasses—Timothy and Red Top are the most valuable and palatable for horses. Timothy should not be allowed to get too ripe and woody ere being cut. The greatest recommendation for Timothy hay is that it is clean and not so liable to mould, must or spoil as other hay. The quality of Red Top also depends on the time of cutting and the after care received. It is more difficult to cure than Timothy. In feeding prairie hay, if possible, feed the hay from the higher land to horses.

## Straw.

The feeding of straw is especially serviceable in lessening the feed cost in the winter season. Oat straw, wheat straw and barley straw under the same conditions, have feeding value in the order named. There is a great deal of misconception as to the amount of hay or straw a horse should receive. It is not good policy to stuff the manger full at every opportunity. In feeding both grain and roughage, horses should never be given any more than they will clean up at the one meal. The amount fed will depend upon the quality of the roughage, the size of the horse and the kind and duration of work the animal has to perform. Generally speaking, about one-quarter the daily roughage ration should be fed in the morning, about one-quarter at noon and the balance at night. Roots may be profitably fed during the winter months. When fed idle horses a few pounds per day were found to give satisfaction, aiding in the digestion and rendering the ration more palatable. From two pounds to six pounds per day has been found to be the correct amount.

**Three Good Rules** in connection with feeding horses are:

1. Feed regularly.
2. Vary the feed as much as possible.
3. Never feed more than they will clean up.

## Watering.

Regularity of watering at a set period is important. The general consensus of opinion is that watering immediately after meals is injurious. As a general principle the most desirable method is to water before feeding. Horses that are extremely hot should receive very little water and no grain, until they have cooled off for a short time. Horses should be watered as frequently as possible, especially during hot weather. Horses working hard in mid-summer and watered only three times a day, drink too much at a time and will not thrive. Horses should be watered the first thing in the morning and the last thing at night, though not immediately after receiving their grain feed.

Many horses stand all night with a manger full of dry hay before them, simply because they are too dry to eat. This applies to the winter as well as the summer. The stomach of the horse will only hold from sixteen to nineteen quarts, and as a thirsty horse will drink from five to ten gallons at a time, it is an undoubted fact that when horses are watered immediately after a meal, about three-quarters of the food in the stomach is washed into the intestines (which have great capacity) without giving the stomach juices time to perform their share of the digestive function. As a general rule, about two hours is necessary to digest the majority of the materials contained in the stomach. The main thing to remember is to water as frequently as possible, and, if at all practicable, at least two hours after the evening feed has been given. Horses will not drink sufficient water in very cold or windy weather, if forced to stand at an open unsheltered trough. Surrounding temperature, nature of work and feed, together with the individuality of the animal, all influence the amount of water a horse consumes.

## Fattening Horses.

Horses for sale purposes often require fattening. The draft horse market is peculiar, as weight is one of the most important factors in determining the price. Nine-tenths of our draft horses which are sold, weighing from 1,600 to 1,700 pounds, should be made to weigh from 1,800 to 2,000 pounds. Every pound from 1,800 to 2,100 pounds is worth about 50 cents a pound. Usually every 100 pounds in a draft horse after he weighs 1,600 to 1,800 pounds is worth twenty-five cents a pound, hence the importance of having the horse really fat when it is to be offered for sale.

## Stabling.

The average Western farmer can afford no elaborate accommodation, but every consideration should be shown in building stables to accommodate what is the sole motive power on the majority of farms. Stables should be as light and well ventilated as possible, with a fairly high roof to the horse stable, itself not less than eight feet clear in width, single stalls with four feet centres. even dry floor and should slope slightly to the rear. Team stalls should be not less than eight feet clean in width, single stalls with four feet centres. Have a solid, dry floor, whether concrete, plank or earthen. Nothing is so disagreeable as a stable full of wet mud holes. Never cobble your horse stalls with stones. How would you like to sleep on it yourself, even with a few inches of straw under you. Have a seven foot door not less than four feet wide. See that there is a hook to keep it open when leading horses out. Don't have a high raised threshold. Build your mangers with slat bottoms so that dust, dirt, etc. from the hay, will fall through or can be easily cleaned out. Build deep feed boxes. If a horse insists on throwing out its grain a couple of spikes driven half their depth into the middle of the box bottom, about 6 inches from either end, will teach it to mind its manners. Have plenty of harness hooks and have them away from the stalls if possible. Do not put pole partitions between horses unless they are known to be quiet, and even then the poles must be close together and carefully trimmed of all knots, etc. Above all, keep your stables clean.

## Bedding.

Bedding is cheap in this Province. Never let a horse lie down, winter or summer, without at least a foot of loose straw under it. Try it and see how your horses will improve in condition.

## Grooming.

Work horses should be thoroughly groomed every night. If this is done a brisk brushing in the morning is all that is necessary for the major portion of the body. A horse needs and likes a grooming just the same as a man needs and likes a washing—namely, when tired and dirty. Try this out and see. In grooming, only use the curry comb where absolutely necessary, and remember that the shoulder face, back bone and limbs, especially the joints, besides all the more tender portions of the body, should never know the touch of the comb. Put yourself in the horse's place. Many a sore shoulder has been started by injudicious use of the curry comb. See that the collar seat is well cleaned every morning.

**Feet.**—Keep the feet trimmed and even. With shod horses renew the shoes every six, or at the outside, eight weeks. Clean out the feet at night. Horses standing on a plank floor will need to have their feet artificially softened in winter or if idle, contracted feet from this cause are needless and profitless.

**Harness.** -Keep the harness always in good repair and thus avoid accidents. Always use a good set of lines. See that the collar fits, and, if of felt, brush the face thoroughly every morning. If leather, rub with a damp cloth. Keep the leather soft with oil or grease, preferably oil. Adjust the harness so that the draft is even on the entire shoulder-face. See that the hames fit snugly in the collar and always keep them tight.

**Hitching.**—In hitching, always have the tugs straight—not twisted. Many a sore leg has resulted from a carelessly hitched tug. See that the horses are drawing squarely, with as little side-draft as possible. Have your lines set to bear evenly on every horse.

## Breaking.

A colt, like a child, must be taught young. Speak quietly and always use the same terms. Break the colt to work on a tight line, to drive up on the bit, whether light or heavy.

Heavy horses do most of their work at a walk. Never trot a heavy team on the road; it spoils their walking gait, besides being hard on them. **Never jerk their mouths.** Accustom the colt to bit and harness for some time before you hitch it up.

## Road and Field Management.

A good average gait on good roads with a load is two and three-quarter miles an hour; horses on the land plowing or doing equally heavy work, should not exceed an average of two miles per hour. A few moments rest at the end is beneficial on the half mile stretch. A long rest tends to stiffen the animals. Start a team easily first thing until the shoulders get warmed up. Ease the collars once in a while, especially in the early part of the season, and bathe the shoulders at night with salt and cold water.

## Cost of Feeding.

In an experiment at Ottawa, it was found that the average cost per day of feeding a horse was 27-35c with 8c added for care.

**Note**—The severity of the work is estimated by:

1. The weight or draft of the load.
2. The rate at which it is drawn.
3. The kind of footing afforded.
4. The length of the working day.

The average hauling power, walking, of a 1,200 pound horse, was found to be 108 pounds for an entire day's work (9 hours) or about one-eleventh of the weight of the animal. This may be increased if the length of time is reduced.

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